

bling together in flocks of hundreds of individuals, on riversides and margins of pools, but these were almost always composed of males, the females remaining in the forests where toward the afternoon their partners join them." Bates (Naturalist on the Amazon, p. 386, 1863) observed 80 species belonging to 22 different genera congregating on the sand and says "it is a singular fact that, with very few exceptions, the individuals of these various species, sporting in sunny places were of the male sex; their partners, which are much more soberly dressed, and immensely less numerous than the males being confined to the shades of the woods. Every afternoon as the sun was getting low I used to notice these gaudy sunshine loving swains trooping off to the forest."



Notes on a Collection of Centipeds chiefly from Louisiana, Arkansas and Missouri (Chilopoda).

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Herewith are listed the species of chilopods represented in a collection made for the most part by Mr. Leslie Hubricht in Louisiana, Arkansas, Missouri, Oklahoma and Texas in the years 1935 and 1936.

The types of the four new species described are retained in the author's collection.

SCOLOPENDRIDA.

OTOCRYPTOPS SEXSPINOSUS (Say). Localities—Louisiana: Sheridom, August 20, 1940, one specimen; Natchitoches Parish, 2 miles south of Saline, April 12, 1936, 2 specimens. Arkansas: Jackson County, 1.5 miles southwest of Oliphant, April 10, 1936, one specimen. Missouri: St. Louis Co., 4.3 miles northwest of Glencoe, March 1, 1936, one specimen.

THEATOPS POSTICUS (Say). Localities—Louisiana: Tali-

sheek, February 9, 1939, 2 specimens; Greenburg, February 5, 1939, one specimen. Texas: Brazos County, 8 miles south of College Station, April 21, 1936, 3 specimens.

T. SPINICAUDUS (Wood). Locality—Arkansas: Jackson County, 1.5 miles northwest of Oliphant.

SCOLOPENDRA VIRIDIS Say. Locality—Louisiana: Caddo Parish, 5 miles northwest of Shreveport, April 13, 1936, one specimen.

S. HEROS (Girard). Locality—Texas: Brazos County, 14 miles southwest of College Station, April 21, 1936, one specimen.

GEOPHILIDA.

ARENOPHILUS BIPUNCTICEPS (Wood). Localities—Oklahoma: Murray County, Arbuckle Mountains, near Turner Falls, April 23, 1936, two specimens. Louisiana: Caddo Parish, 5 miles northwest of Shreveport, April 13, 1936, two specimens. Missouri: St. Louis County, 1 mile south of Kirkwood, March 15, 1936, one specimen; Musick's Ferry, May 15, 1934, one specimen.

LINOTAENIA BIDENS (Wood). Locality—Missouri: Jefferson County, 1.5 miles southeast of Maxville, December 8, 1935, one specimen taken "under log on hillside."

L. CHIONOPHILA (Wood). Locality—Missouri: St. Louis County, 4.3 miles northwest of Glencoe Station, March 1, 1936, one specimen.

L. FULVA (Sager). Locality—Missouri: St. Louis County, .5 miles east of Morschels, March 15, 1936, one specimen.

Escaryus missouriensis new species.

General color of dorsum dark yellow anteriorly and especially the head of a distinct chestnut tinge.

Head longer than broad in about the ratio 36:29. No front suture. Cephalic plate overlapping the basal. First maxillae without lappets.

Clypeus uniformly areolate throughout. No clear spots free from the polygonal areas; a pair of setae about one-fourth the distance from labrum to anterior end and about eight setae in a patch anteriorly.

Prosternum anteriorly with a median v-shaped excision on each side of which is a low, transverse, chitinous plate; without chitinous lines. Femur of prehensors with a tooth at extreme

distal end within; the next 2 joints also with low rounded tubercles at distal end; tooth at base of claw absent or obsolete.

Spiracles all circular, the first greatly exceeding the second in size.

Anterior sternites with a deep longitudinal depression or sulcus across the middle portion; all entirely without a "carpopagus" structure.

Last sternite narrow, scarcely narrowing caudad, much longer than wide. Last coxopleurae large, bearing numerous small pores over nearly entire surface except caudal area above and caudomesal area below.

Anal leg; of male moderately inflated; Claw normal.

Anal pores distinct.

Gonopods of male long, slenderly conical.

Pairs of legs, 59.

Length, about 65 mm.

Locality—MISSOURI: St. Louis County, 4.3 miles northwest of Glencoe. One male taken by Leslie Hubricht, March 11, 1936.

LITHOBIIDA.

Gosibius louisianus new species.

A species belonging to *Gosibius* sens. str. in having the posterior angles of the 9th, 11th and 13th dorsal plates produced.

Dorsum chestnut colored.

Antennae moderate, composed of 26 articles in both types. Ocelli, e.g., 1 + 3, 3, 3, 1, the single ocellus much enlarged and the caudal ocellus of top row also considerably enlarged.

Prosternal teeth as usual, 2 + 2, with extal spine setiform.

Ventral spines of first legs 0, 0, 2, 2, 1. Ventral spines of penult legs, 0, 1, 3, 3, 2; dorsal 0, 3, 2, 2; claws 2. None of coxae armed either dorsally or laterally.

In the male the fourth joint is moderately thickened and is longitudinally furrowed above.

Claw of female genital forceps strictly entire as usual; basal spines 2 + 2; basal joint presenting a chitinous mesal edge which is proximally excavated.

Length of male holotype, about 19 mm.; of female allotype, about 15 mm.

Locality—LOUISIANA: 5 miles northwest of Shreveport. Male and female taken under log April 13, 1936, by Leslie Hubricht.

Related to *G. monicus* of California but readily separated in lacking spines on the posterior coxae and in having the ventral

spines of the anal legs 0, 1, 3, 2, 1 instead of 0, 1, 3, 3, 1.

Guambius hubrichti new species.

Dorsum light brown, with head and antennae darker.

Antennae composed typically of 28 articles. Ocelli, *e.g.*, 1 + 3, 2(3), 1, the single ocellus much enlarged and those at caudal end of series also notably larger than the anterior ones.

Prosternal teeth and spines as usual.

Posterior angles of 9th, 11th and 13th dorsal plates produced (subgenus *Sibibius*).

Coxal pores small, circular, in number, *e.g.*, 4, 4, 4, 3 and 3, 3, 3, 3.

Ventral spines of first legs, 0, 0, 1, 3, 1. Ventral spines of penult legs, 0, 1, 3, 3, 2; dorsal, 0, 0, 3, 2, 1; claws 2. Ventral spines of anal legs, 0, 1, 3, 3, 1; dorsal, 0, 0, 2, 0, 0; claws 2. None of coxae armed.

Anal legs of male with fourth joint strongly inflated, with longitudinal, laterally compressed, elevated keel which is evenly convex from end to end with a uniform series of setae along the edge. Fifth joint of penult leg with a conspicuous lobe at distal end on caudo-dorsal surface the upper face of this lobe flat.

Claw of female gonopods entire as usual, with the basal spines 2 + 2.

Length, about 12 mm.

Locality—LOUISIANA: Natchatoches Parish, 2 miles south of Saline. Two adult males and a not fully mature female taken under logs April 12, 1936, by Leslie Hubricht, for whom the species is named.

Related to *G. oedipes* but differing in having 2 claws instead of 3 on the anal legs with dorsal spines 0, 0, 2, 0, 0 instead of 0, 0, 3, 2, 1, etc. The form of the fourth joint in the anal legs of male is also clearly distinctive.

LITHOBIUS FORFICATUS (Linne). Locality—Missouri: St. Louis County, Maplewood, January 12, 1936, several specimens of both sexes.

NADABIUS IOWENSIS (Meinert). Localities—Missouri: Kirkwood, Osage Hills, January 10, 1935, three specimens; St. Louis County, Creve Coeur Lake Park, March 8, 1936, one male.

POKABIUS BILABIATUS (Wood). Locality—Missouri: St. Louis County, .5 miles east of Morschels, March 15, 1936, sev-

eral specimens.

NEOLITHOBIUS AUDACIOR Chamberlin. Locality—ARKANSAS: Jackson County, 1.5 miles southwest of Oliphant, April 10, 1936, four specimens.

N. TRANSMARINUS (L. Koch). Localities—Louisiana: Cad-do Parish, 5 miles northwest of Shreveport, April 13, 1936, two specimens. Texas: Brazos County, 8 miles south of College Station, April 21, 1936, three specimens.

***Neolithobius entonus* new species.**

A species related to *N. latzeli* and *N. arkansensis* in general structure and in the spining of the legs but differing from both in having the claw of the female gonopods strictly entire instead of tripartite as well as in its considerably larger size.

Antennae moderately long, composed typically of about 42 articles. Ocelli 1 + 6, 6, 7, 6, 6, 6, the series somewhat oblique, the single ocellus large.

Prosternal teeth typically 9 + 9 or 8 + 8.

Coxal pores strongly transverse, lying in depression or groove; in number usually about 10 on each poriferous coxa.

Spining of legs as in *latzeli*.

Anal legs of male long and slender, the fourth joint but slightly modified.

Length, up to 35 mm.

Localities—OKLAHOMA: Latimer County, 2 miles east of Gowen, 8 specimens taken April 26, 1936. ARKANSAS: Pulaski County, 3 miles northeast of North Little Rock, April 11, 1936, four specimens, and Jefferson County, ½ mile south of Locust Cottage, April 11, 1936, one specimen. All specimens collected by Leslie Hubricht.

BOTHROPOLYS MULTIDENTATUS (Newport). Locality—Missouri: St. Louis County, 2 miles west of Wellston, February 19, 1935, two taken under logs.

SCUTIGERIDA.

SCUTIGERA COLEOPTRATA (Linne). Localities—Missouri: St. Louis County, Forest Park, in bird house, March 14, 1936, one specimen; Fern Glen, March 1, 1936, one specimen; taken under rocks; St. Louis, April 5, 1934, several specimens taken in house on Lincoln Avenue; Musicks Ferry, May 15, 1934, several taken under rocks.